

Waveguide Amplifiers up to 340 GHz



TECHNICAL SPECIFICATIONS

- **Frequency range**
WR22 to WR04 waveguide bands (up to 340 GHz)
- **Configurations**
Low Noise Amplifiers (LNA) and High Power Amplifiers (HPA)
- **Bandwidth options**
Narrow-band and full-band designs for specific application requirements
- **VSWR**
Low VSWR performance for minimal signal reflection and impedance matching
- **Performance**
Gain flatness and noise figure optimization across target frequency ranges
- **Customization**
Custom design capabilities to meet specialized electrical and mechanical requirements

APPLICATIONS

SATCOM Systems: Satellite uplink and downlink signal conditioning in Ku-, Ka-, and Q-band networks

Defense and Military: Radar, electronic warfare, and secure communication systems requiring waveguide integration

5G and Beyond: mmWave backhaul and fronthaul amplification supporting next-generation wireless infrastructure

6G Research: Sub-terahertz experimentation and prototype development for future communication standards

Automotive Radar: High-frequency sensing amplification in autonomous vehicle platforms

Scientific Instrumentation: Spectroscopy, material analysis, and fundamental physics research applications